

SCDXC Newsletter



The Southern California DX Club is a group of dedicated men and women active in the amateur radio community who enjoy communicating over the air with other radio amateurs around the world.

The SCDXC strongly supports the DX Code of Conduct. Please visit their website:

www.dx-code.org

The SCDXC newsletter is published monthly and released to club members around the first of each month. Amateur and DX related letters, news and pictures are welcome and will be published as time and space permit.

Articles will be republished with recognition of the author and the club. Re-use of copyrighted materials require the original author's permission.

Any questions regarding this newsletter or its articles should be addressed to the Editor, Bill, N6RV at:

n6rv@scdxc.org

Club meetings are held on the second Thursday of the month at 7:00 PM except April, June, and December.

Please check the club web site for events and details at:

<http://www.scdxc.org>

If you are in the area please say hello on our repeater:

W6AM/R 145.48, (-) PL 100.0

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If you need him get in there and work him"



Announcements

No July Meeting!

2021 Visalia Get Together March 19, 20, and 21

Some of us attend the Visalia DX Convention in great measure to socialize with close friends, hams that we work on the air, and potential new friends. Some of us feel that this in-person socialization is an important part of our radio lives. '

The planned 2021 Internet convention is missing the in-person socialization, and the smaller social gathering is planned to fill that void.

The social gathering is not organized to compete with the main convention, but to augment it. The event's date was selected to not conflict with the main event.

Social Gathering Details

As announced previously, a Visalia DX and Contesting Social Gathering is planned for March 19, 20, and 21 at the Visalia, California, Wyndham Hotel (refurbished former Holiday Inn,).

Health Concerns

None of us are interested in contracting the Covid-19 virus, nor are we interested in anyone else contracting it at the event. We are uncertain about what impact the virus will be having ten months from now. We may cancel the event. We may cancel the event very close to the planned date if health concerns warrant it.

We expect to know considerably more about how society is faring as we approach the date. Radio-convention wise, Quartzfest, Orlando, and Yuma will have recently either functioned or have been cancelled, and that will impact our planning.

If the event happens, we don't know whether we will try to require masks, enhanced social distancing, diver's helmets with oxygen tanks, or what. At present, I don't expect to be shaking hands with anyone.

Overall Philosophy

Rather than have any particular clubs involved, Jim Neiger, N6TJ, and I decided to run the gathering as two individuals. This permits rapid reaction to whatever the future holds. Note that I was the Convention Chairman, when the DX Convention was first moved to Visalia in 1978, and where we had a two-person convention committee. We have the experience to make this event function smoothly.

Our intent is to keep the event as simple as possible. We do not expect to make money. In fact, we hope to not handle any money. The exact procedure for paying for the dinners is presently undefined, but we are working to somehow have attendees pay the hotel directly.

We expect that there will be no raffles, no prizes, no programs, no registration packets, no patches, no reserved seating, and probably no something-elses.

We expect that this event will be smaller than previous Visalia's, and smaller than the main Internet event as well.

There will probably be an organized ARRL discussion, maybe some sort of organized contest discussion and/or DX discussion, and maybe a presentation or two on some sort of operation such as an expedition. Major DX-pedition presentations should be left for the main Internet event. The format of the discussions will be in some way dependent on the number of attendees present. These may be round table discussions or larger forums. We have been given use of the hotels meeting rooms. Any agenda will likely be finalized in the week before the event. If you have something you feel would be of interest that you can present or lead, please let us know.

If an ARRL or CQ Magazine QSL-card Checker shows up, there may be QSL checking, something probably not expected over the Internet.

The major activity is expected to be talking with each other, in a safe way. We will encourage getting to know people that you do not know well.

Exhibitors

We have received inquiries regarding exhibitors. The current plan is to suggest that anyone wanting to exhibit products simply rent one of the first-floor rooms that face hallways or other public areas, like we did 30 or 40 years ago. As we get closer, we will know the expected attendance, and whether the event merits exhibitors.

Volunteers

Some of you have volunteered to help. Let's see what is needed as we proceed.

Hotel

The Wyndham Hotel appears to be very desirous of our business, and is working hard to make this work. A reduced hotel rate of \$95 per night for one or two beds has been negotiated. The rate applies for Friday night, March 19, and Saturday night, March 20. A smaller number of rooms is also available for Thursday night, March 18. Reservations may be cancelled up until one day before. Call (559) 651-5000, Group code: 031 821 CAL. Group name: California DX Club. Parking is free. Motor home parking is free, but if hookup is needed, expect a small cost. Make your cancellable reservations directly with the hotel.

Expenses

We are endeavoring to run this without cost, but if we end up buying a bunch of cans of soda, we can probably live eating the expense. Otherwise, there may be a donation jar.

From You

If think you will attend, please let Jim know at N6TJ@sbcglobal.net . If you have a probability of attending, such as 50%, please add that information.

Show up. Bring adequate funds to pay for whatever you eat and drink.

Talk to your friends, safely.

Keep in mind that the event is 10 months away, and will not happen if conditions are not safe. Suggest not buying non-refundable airline tickets.

2020 Board of Directors

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President and VP Combined Column de Doug - W6HB

Our President Scott, W6MKO, is on a road trip and due back into California around July 15. The contents of this short column will attempt to cover our joint inputs gelled during a phone conversation on 6/28.

Upon his return Scott plans to work on packaging a virtual meeting targeted to convene at 0900 on August 8. Details will be communicated via an E-Blast from Webmaster Jim and in the August BULLETIN. At this time it may be on the Zoom or Skype platforms. Please email Scott with your ideas and to pitch an inaugural program.

As many of you already know the IDXC 2021 chaired by the NCDXC will be a virtual event in April with no physical presence in Visalia.

If the pandemic allows, a "mini-Visalia" will be chaired by N6TJ, Jim Niger, and N6AA, Dick Norton, and be convened at the Visalia Wyndham in mid March in 2021. This is a social event with no specific programs, vendors or prizes planned at this time. Stay tuned for more info if you have not already been approached directly.

Your club is still in need of a lead and team to take on the administering of the "Edgar Ward Brown N6OU Award." Please contact Scott, W6MKO, if you are interested.

A work party is still needed to remove SCDXC property from WEMS. Please contact Scott, W6MKO, or Mel, K6SY if you are available to assist and or if you want any of the chairs we need to remove.

Stay healthy and unless you get on the air you can expect to miss some really BIG surprises. I will let Publisher Bill, N6RV, expand on that!

July Calendar

July	1	RAC Canada Day Contest
July	4	DL- DX RTTY Contest
July	4	Worldwide Sideband Activity Contest
July	9	No Regular Meeting
July	11	IARU HF World Championship
July	18	CQ Worldwide VHF Contest
July	21	Worldwide Sideband Activity Contest
July	27	Worldwide Sideband Activity Contest

For more contest Info see: <http://www.hornucopia.com/contestcal/contestcal.html>

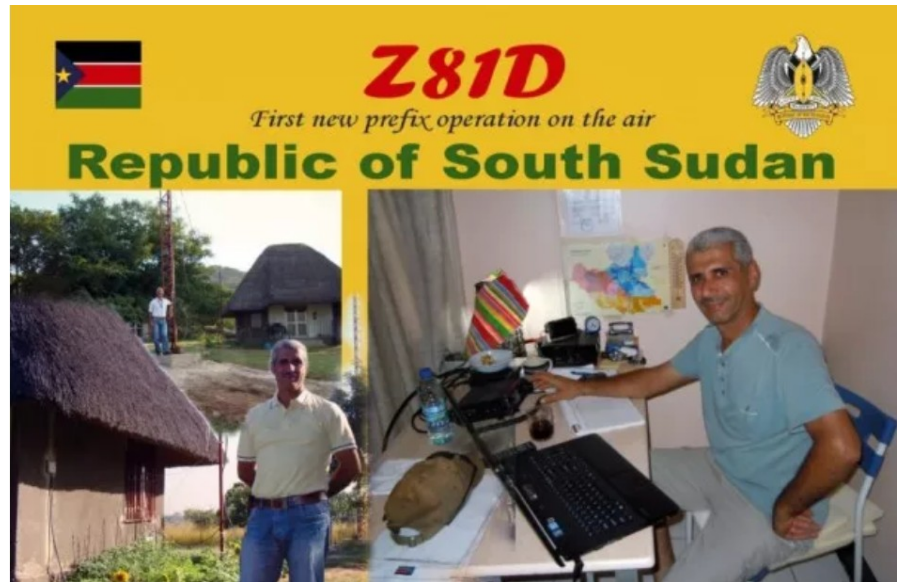
Rumors on the Band

Things are lightening up a little with respect to travel and COVID 19. We have a few brave individuals travelling to some out of the way places! In spite of this there is plenty of DX operating from home so get on the air!

QTH	Call	Start Date	End Date	Information
Balearic Is	EA6/DK5ON	1-Jul	11-Jul	EA6/DK5ON 40-6m
Vanuatu	YJ40IND	1-Jul	31-Jul	YJ8RN YJ8ED YJ8CW 40 20 15m SSB FT8 CW
Monaco	3A/IW1RBI	6-Jun	19-Jun	SV2RSG 20m WWB CW
Liechtenstein	HB0/HB9HBY	24-Jun	26-Jun	HB9HBY HB9TWU 80-6m CW SSB FT8

ClubLog Top 50 Most Wanted Entities

1. P5 DPRK (NORTH KOREA)
2. 3Y/B BOUVET ISLAND
3. FT5/W CROZET ISLAND
4. BS7H SCARBOROUGH REEF
5. CE0X SAN FELIX ISLANDS
6. BV9P PRATAS ISLAND
7. KH7K KURE ISLAND
8. KH3 JOHNSTON ISLAND
9. 3Y/P PETER 1 ISLAND
10. FT5/X KERGUELEN ISLAND
11. FT/G GLORIOSO ISLAND
12. VK0M MACQUARIE ISLAND
13. YV0 AVES ISLAND
14. KH4 MIDWAY ISLAND
15. ZS8 PRINCE EDWARD & MARION ISLANDS
16. PY0S SAINT PETER AND PAUL ROCKS
17. PY0T TRINDADE & MARTIM VAZ ISLANDS
18. KP5 DESECHEO ISLAND
19. SV/A MOUNT ATHOS
20. VP8S SOUTH SANDWICH ISLANDS
21. KH5 PALMYRA & JARVIS ISLANDS
22. JD/M MINAMI TORISHIMA
23. EZ TURKMENISTAN
24. ZL9 NEW ZEALAND SUBANTARCTIC ISLANDS
25. YK SYRIA
26. FK/C CHESTERFIELD IS.
27. VK0H HEARD ISLAND
28. ZL8 KERMADEC ISLAND
29. FT/T TROMELIN ISLAND
30. KH1 BAKER HOWLAND ISLANDS
31. KH8/S SWAINS ISLAND
32. XF4 REVILLAGIGEDO
33. VP8G SOUTH GEORGIA ISLAND
34. KH9 WAKE ISLAND
35. T33 BANABA ISLAND
36. VK9M MELLISH REEF
37. 4U1UN UNITED NATIONS HQ
38. T31 CENTRAL KIRIBATI
39. TI9 COCOS ISLAND
40. VK9W WILLIS ISLAND
41. 3D2/C CONWAY REEF
42. FT/J JUAN DE NOVA, EUROPA
43. FO/C CLIPPERTON ISLAND
44. VP8O SOUTH ORKNEY ISLANDS
45. HK0/M MALPELO ISLAND
46. KP1 NAVASSA ISLAND
47. 7O YEMEN
48. ZD9 TRISTAN DA CUNHA & GOUGH ISLANDS
49. H40 TEMOTU PROVINCE
50. FT5Z AMSTERDAM & ST PAUL ISLANDS



DX Standings

Peter, N0FW, submitted his DXCC and WAZ update. Last month we forgot to mention that Kent, N6WT, also submitted and update. Thank you both Peter and Kent for keeping the lists fresh!

Send any updates to:

N6RV@SCDXC.org

SCDXC WAZ and DXCC Standings

The first WAZ column is the confirmed zone count on 10 bands 160 - 6 (less 60 meters). The second column is the regular 5BWAZ confirmed count. The following are the codes that follow the two columns and indicate the awards:

M	Mixed
P	Phone
C	CW
R	RTTY

SCDXC Lifetime Standings										WAZ Standings				
Rank	Call	Total	Current	Slots	Rank	Call	Total	Current	Slots	Rank	Call	11B	5B	Awards
1	W6KH	389	340		63	K6JW	329	323	1068	1	N0FW	418	200	M/P/C/R
2	K6KII	387	340		64	AA6PW	328	328	1709	2	WA5VGI	399	200	M/P/C/5
3	JA1BK	383	340	3147	65	N6AX	327	327	1198	3	K6ND	390	200	M/5
4	K6YRA	378	340	2272	66	AC6DX	322	320	1887	4	W6SR	382	200	M/P/C/5
5	OH2BH	377	340		67	N6NPG	319	319		5	K6FG	368	200	M/P/C/R/5
6	ON4UN	373	340	1975	68	K7MY	319	317	831	6	W8DX	357	200	M/5
7	N0FW	372	340	2978	69	AK6I	317	317		7	N6AW	355	200	M/P/C/5
8	N6UC	368	339		70	W1YL	315	315		8	K6YUI	353	200	M/P/C/R/5
9	DJ9ZB	365	340	2665	71	KC6T	314	314		9	K6YRA	337	200	P/5
10	K6YUI	366	340	2598	72	N6GP	314	292	1583	10	N6OU	220	200	
11	W6BCQ	365	339	1600	73	W6HB	311	311	1029	11	SM5GMZ	352	200	M/P/C/5
12	NS6C	361	340	2503	74	N6VNI	311	309	1550	12	N6WS	397	200	M/P/C/R
13	K6SMF	360	338		75	NK6A	303	297	957	13	W6VX	352	199	M/P/C
14	W6SR	359	340	2799	76	N6WT	299	299	1582	14	K6GXO	358	198	M
15	W6HT	358	340		77	K6IRD	298	292	649	15	W6ENZ	350	197	
16	K6FG	357	340	2774	78	ZL3TE	297	295	1430	16	K6RO	331	197	M/P/C
17	K8RD	357	340		79	N6DHz	295	289	1053	17	N6HY	365	196	M/P/C
18	WA6WZO	357	339		80	N6UOZ	280	280		18	W6TK	341	195	
19	N6RV	356	339	2226	81	KT6LA	279	277	1035	19	AI6Z	321	194	
20	W6OU	356	337	1599	82	WA6WXD	274	220		20	N6MXU	155	193	
21	K6GXO	355	340	2633	83	K6RI	262	262	683	21	NS6C	342	192	
22	K5KT	355	340		84	K6VC	259	225		22	N6RV	353	190	M/P/C/R/5
23	W6TJI	355	338		85	K6SS	255	225	882	23	KR6C	333	188	M/P/C/R/5
24	K6IPV	355	335	1800	86	W3SE	249	244	754	24	N6PE	331	186	
25	N6QQ	354	338	2178	87	W6DOE	244	244	1005	25	KC6X	320	189	
26	W6IRD	354	338		88	KQ6K	243	243		26	N6QQ	337	187	
27	W8DX	352	339	2517	89	N6VOH	243	222		27	KM6HB	316	186	
28	W6RW	351	337	1991	90	W6LEN	236	236	771	28	W6DR	325	185	
29	W6TK	350	340	1945	91	K6JEY	234	234		29	AC6DX	321	185	
30	W6YOO	350	340	2130	92	N6HE	233	225	642	30	W6YOO	308	185	
31	KC6X	350	339	2081	93	N6AA	222	222		31	N6GP	304	184	
32	N6WS	351	339	2378	94	W6VWV	220	220	691	32	W6OU	300	185	
33	N6HK	350	340		95	K6AWB	219	219		33	K7ACZ	308	183	
34	N7NR	350	329	1127	96	N6PM	219	219	1030	34	K4ST	278	182	
35	W6FL	350	336	1380	97	K6DDJ	214	211	551	35	ZL3TE	298	181	
36	W6KK	349	340	1864	98	NE6V	213	213	663	36	AA6PW	291	181	
37	W6ENZ	349	339	2383	99	W6KC	203	202	589	37	N6VNI	299	178	
38	W6VX	349	339	2772	100	W0PE	201	201		38	K6SY	261	177	
39	N6HC	349	340	2319	101	W6JEA	195	195		39	K6KII	191	178	
40	KJ6Y	348	340	1312	102	N6LL	169	169		40	KT6LA	233	173	
41	WA5VGI	348	340	2723	103	KF6I	166	166		41	K0OK	286	173	
42	K6ND	348	339	2562	104	K7LA	160	160	365	42	K6SY	261	178	
43	N6IC	347	337		105	W6EA	152	152		43	W6ZPL	237	173	
44	SM5GMZ	346	335	2379	106	W6QE	149	149	224	44	KJ6Y	261	172	
45	KR6C	345	339	2074	107	N6DBF	142	142	374	45	N6WT	326	169	
46	N6HY	345	337	2424	108	AB9A	141	141		46	N6DHz	253	168	
47	K6RO	346	338	2256	109	KI6RRD	139	138	376	47	N6PM	290	157	
48	K6LPO	344	331	1236	110	N6CA	133	133		48	NK6A	217	156	
49	N6PEQ	343	337	1941	111	N6RU	129	128	279	49	W6KC	161	153	
50	KM6HB	343	336	1933	112	K6MKL	126	126	185	50	W6FL	256	149	
51	N6PE	343	331	1941	113	K6DSW	122	122	268	51	NE6V	213	142	
52	AI6Z	342	335	2174	114	KC6TOD	120	120		52	K7MY	227	141	
53	K7ACZ	341	337	1756	115	W6MKO	110	0	0	53	N6HE	195	134	
54	N6MXU	341	331	1416	116	K9TAD	109	109	137	54	KB6CIO	205	132	
55	N6XT	339	332	1413	117	KA6D	107	107		55	K6DDJ	182	132	
56	W6SW	339	331	540	118	K6BBC	103	103		56	KB6CIO	205	132	
57	W6ZPL	338	335	1367	119	NQ6L	101	101		57	K6IRD	154	126	M/P
58	K4ST	337	333	1843	120	K6SBA	100	100		58	W6SW	149	119	
59	K2IXQ	337	332	1746	121	N6YQ	100	100		59	N6DBF	179	118	
60	K6SY	335	329	1070	122	WA6MEM	100	100		60	KI6RRD	181	113	
61	W6DR	331	326	1431	123	N6RRY	100	70	125	61	K6RI	172	112	
62	K6QU	330	324	1435						62	W3SE	102	112	
										63	W6IRD	151	111	M/P
										64	W6MKO	145	96	
										65	K6VC	96	96	M/P
										66	N6RU	132	96	
										67	K0XP	124	88	
										68	W6EA	92	86	
										69	KE6PLA	123	81	
										70	N6UC	78	78	M
										71	K6QU	105	69	
										72	KA6TTV	82	67	
										73	N6RRY	76	65	
										74	K9TAD	64	57	
										75	KJ6UVQ	69	52	
										76	K6JW	40	40	M/P
										77	N6HK	40	40	M
										78	W6DOE	37	37	
										79	W6LEN	33	27	
										80	K6FOD	17	13	
										81	N6HC	17	13	M/P/C
										82	KB6TKV	17	13	P
										83	K8RD	17	13	C

2020 Get Schroeder Contest

1A0	4S	7Q	A3	CE9	E7	FK	GI	HS	KH0	LZ	PJ7	T2	TY	VK9L	VU4	YV0
1S	4U1ITU	7X	A4	CN	EA	FK/C	GJ	HV	KH1	OA	PY	T30	TZ	VK9M	VU7	Z2
3A	4U1UN	8P	A5	CO	EA6	FM	GM	HZ	KH2	OD	PY0F	T31	UA	VK9N	XE	Z3
3B7	4W	8Q	A6	CP	EA8	FO	GU	I	KH3	OE	PY0S	T32	UA0	VK9W	XF4	Z6
3B8	4X	8R	A7	CT	EA9	FO/A	GW	IS0	KH4	OH	PY0T	T33	UA2	VK9X	XT	Z8
3B9	5A	9A	A9	CT3	EI	FO/C	H4	J2	KH5	OH0	PZ	T5	UJ	VP2E	XU	ZA
3C	5B	9G	AP	CU	EK	FO/M	H40	J3	KH6	OJ0	R1F	T7	UN	VP2M	XW	ZB2
3C0	5H	9H	BS7H	CX	EL	FP	HA	J5	KH7K	OK	S0	T8	UR	VP2V	XX9	ZC4
3D2	5N	9J	BU	CY0	EP	FR	HB	J6	KH8	OM	S2	TA	V2	VP5	XZ	ZD7
3D2/C	5R	9K	BV9P	CY9	ER	FS	HB0	J7	KH8S	ON	S5	TF	V3	VP6	YA	ZD8
3D2/R	5T	9L	BY	D2	ES	FR/G	HC	J8	KH9	OX	S7	TG	V4	VP6/D	YB	ZD9
3DA	5U	9M2	C2	D4	ET	FR/J	HC8	JA	KL7	OY	S9	TI	V5	VP8	YI	ZF
3V	5V7	9M6	C3	D6	EU	FR/T	HH	JD1/M	KP1	OZ	SM	TI9	V6	VP8/G	YJ	ZK3
3W	5W	9N	C5	DL	EX	FT5W	HI	JD1/O	KP2	P2	SP	TJ	V7	VP8/H	YK	ZL
3XA	5X	9Q	C6	DU	EY	FT5X	HK	JT	KP4	P4	ST	TK	V8	VP8/O	YL	ZL7
3Y/B	5Z	9U	C9	E3	EZ	FT5Z	HK0/M	JW	KP5	P5	SU	TL	VE	VP8/S	YN	ZL8
3Y/P	6W	9V	CE	E4	F	FW	HK0/S	JX	LA	PA	SV	TN	VK	VP9	YO	ZL9
4J	6Y	9X	CE0X	E5/N	FG	FY	HL	JY	LU	PJ2	SV/A	TR	VK0H	VQ9	YS	ZP
4L	7O	9Y	CE0Y	E5/S	FH	G	HP	K	LX	PJ4	SV5	TT	VK0M	VR	YT	ZS
4O	7P	A2	CE0Z	E6	FJ	GD	HR	KG4	LY	PJ5	SV9	TU	VK9C	VU	YV	ZS8

Chart Legend	
White / Green	Entity Worked This Year by a Member
Black / White	Very Active Entity Not Yet Worked
Black / Blue	Entity with Announced DXpedition
Black / Yellow	Rarely Active Entity Not Yet Worked
Black / Red	Inactive Entity
	Deleted Entity

June started with very good HF openings. In the last week six meters came to life. This resulted in the largest increase in entities worked by club members on 6 meters ever!

It is good to see that many members have improved their annual standings. It gets tougher through the summer months and if most of the DX has already been worked in prior months.

Peter, N0FW still leads the pack with 245 entities. Congratulations to all the members who worked DXCC this year. It is good to see people are still active and participating in this great hobby.

2020 Get Schroeder Leaders							
2020 Total Entities Worked by June							257
2019 Total Entities Worked by June							265
2020 Entities Worked by SCDXC							251
2020 Entities Worked by SCDXC Members in SoCal							239
2019 SCDXC Entities Worked by June							246
2020 ClubLog Leaders Worked by June							252
2019 ClubLog Leaders Entities Worked by June							265
2019 SCDXC Members							273
2019 SCDXC Leader (N6WT)							251
2019 ClubLog Leaders							285
Rank	Call	Entities	Lat Mo.	Last Yr	Leader	-Tot	-QQ
1	N0FW	245	4	-24	17	6	-49
2	N6WT	228	1	-23	0	23	-32
3	N6WS	217	0	-29	-11	34	-21
4	K6RO	216	1	-3	-12	35	-20
5	W6TK	214	0	-32	-14	37	-18
6	N6QQ	196	11	-44	-32	55	0
7	N6RV	191	0	-49	-37	60	5
8	W6OU	187	0	-46	-41	64	9
9	WA5VGI	154	2	-60	-74	97	42
10	SM5GMZ	151	0	-56	-77	100	45
11	N6PM	150	4	-22	-78	101	46
12	NS6C	149	2	-38	-79	102	47
13	AI6Z	139	5	-36	-89	112	57
14	N6VNI	131	2	53	-97	120	65
15	N6DZH	124	3	-16	-104	127	72
16	K6QU	122	8	-73	-106	129	74
17	ZL3TE	115	5	7	-113	136	81
18	N6GP	113	9	-46	-115	138	83
19	K6FG	109	5	-44	-119	142	87
20	K6RI	102	0	-73	-126	149	0

SCDXC Worked Not ClubLog

E6 FT5Z J5 ST TJ

ClubLog Worked Not SCDXC

8R TY VP6/D Z2
T2 VK9L VP8/H

SCDXC Get Schroeder Standings 2020															
Rank	Call	160	80	60	40	30	20	17	15	12	10	6	Total	Slots	Yrs
1	N0FW	109	129	114	111	141	174	144	##	67	74	#	245	1245	24
2	N6WT	11	67	25	131	121	188	94	47	14	15	#	228	731	6
3	N6WS	14	60	47	129	115	162	89	49	35	22	#	217	762	56
4	K6RO	14	50	39	137	77	196	160	79	41	37	#	216	853	32
5	W6TK	14	80	34	132	100	192	131	88	34	37	2	214	844	63
6	N6QQ	12	34	1	137	117	171	107	78	38	40	#	196	761	63
7	N6RV	0	1	5	131	43	149	47	61	6	7	#	191	484	52
8	W6OU	4	14	0	42	11	120	37	13	7	4	0	187	252	57
9	WA5VGI	44	0	53	56	15	120	55	19	4	4	#	154	395	36
10	SM5GMZ	50	65	61	72	26	111	40	21	17	11	0	151	474	51
11	N6PM	34	18	9	40	70	74	62	15	21	23	0	150	366	26
12	NS6C	21	16	0	34	15	118	21	5	3	0	#	149	248	63
13	AI6Z	0	0	0	67	0	123	0	26	0	8	0	139	224	27
14	N6VNI	11	2	0	52	15	111	31	6	0	0	0	131	228	31
15	N6DZH	0	25	0	63	9	103	16	25	2	5	0	124	248	32
16	K6QU	0	13	0	32	28	86	68	36	23	28	8	122	322	6
17	ZL3TE	0	8	4	67	48	39	30	90	12	14	1	115	313	16
18	N6GP	0	39	0	39	2	101	2	26	0	27	4	113	240	31
19	K6FG	13	21	0	59	12	78	36	2	0	2	#	109	250	64
20	K6RI	0	0	1	34	36	31	21	8	3	0	5	102	139	7
21	NK6A	0	5	0	24	0	87	0	45	0	1	0	91	162	75
22	K7MY	0	8	0	40	1	67	2	37	0	1	0	86	156	43
23	W6KC	2	29	0	49	2	66	3	34	0	0	1	80	186	60
24	SK5A	2	3	0	2	3	70	6	2	0	0	0	77	88	44
25	W8DX	0	0	0	9	0	70	0	16	0	0	0	76	95	63
26	W6ENZ	27	8	0	14	21	34	26	6	2	0	#	69	148	53
27	WB6DJI	0	0	0	22	0	58	1	2	0	1	3	64	87	7
28	W6SR	0	5	0	25	1	56	4	13	6	2	0	63	112	53
29	K6SY	0	13	0	40	7	29	16	4	0	0	0	62	109	51
30	KR6C	1	0	0	33	4	31	3	3	0	0	0	55	75	42
31	W6DR	33	6	0	15	2	16	0	6	0	0	2	51	80	40
32	K0XP	37	11	0	6	1	3	1	4	0	0	0	46	63	2
33	K6JW	0	4	0	7	0	37	4	7	0	0	0	45	59	61
34	K6YUI	1	0	0	4	5	15	2	1	0	0	1	19	29	63
35	K6FOD	2	6	0	4	2	2	6	2	0	0	0	14	24	2
36	W6SW	0	0	0	1	0	5	0	0	0	0	0	5	6	41
37	KF6I	1	1	0	2	0	4	0	3	0	0	0	4	11	16
38	K9TAD	0	0	0	3	0	1	0	0	0	0	0	4	4	13
39	W6M KO	0	0	0	2	0	2	0	0	0	0	0	4	4	3
40	N6HY	0	0	0	1	1	2	0	1	0	1	0	3	6	67



Fellowship of the Schroed
All are Welcome!

2020 Get Schroeder Contest

This month we reinstituted the slot, 160 meter and 6 meter standings. As expected 160 has been a challenge. Looking at 6 meters we see Peter is 60% of the way to DXCC... this year! Many club members have worked an inordinate amount of DX on 6. To put this into perspective, Bill, N6RV, led the 2019 standing with 20... for the whole year. Peter, N0FW, who is closer to Europe and other populated DX entities worked 52 entities last year. That speaks to the advantage US stations to the East have over West Coast stations.

We are a few weeks into the Es season on 6 meters. Get on the band! It is a blast!

2020 SCDXC Slot Leaders			160M SCDXC Standings			6M SCDXC Standings		
Rank	Call	Slots	Rank	Call	DX	Rank	Call	DX
1	N0FW	1245	1	N0FW	109	1	N0FW	60
2	K6RO	853	2	SM5GMZ	50	2	N6WS	40
3	W6TK	844	3	WA5VGI	44	3	N6RV	34
4	N6WS	762	4	K0XP	37	4	K6FG	27
5	N6QQ	761	5	N6PM	34	5	N6QQ	26
6	N6WT	731	6	W6DR	33	6	WA5VGI	25
7	N6RV	484	7	W6ENZ	27	7	K6RO	23
8	SM5GMZ	474	8	NS6C	21	8	N6WT	18
9	WA5VGI	395	9	N6WS	14	9	NS6C	15
10	N6PM	366	10	K6RO	14	10	W6ENZ	10
11	K6QU	322	11	W6TK	14	11	K6QU	8
12	ZL3TE	313	12	K6FG	13	12	K6RI	5
13	W6OU	252	13	N6QQ	12	13	N6GP	4
14	K6FG	250	14	N6WT	11	14	WB6DJI	3
15	NS6C	248	15	N6VNI	11	15	W6TK	2
16	N6DHZ	248	16	W6OU	4	16	W6DR	2
17	N6GP	240	17	W6KC	2	17	ZL3TE	1
18	N6VNI	228	18	SK5A	2	18	W6KC	1
19	AI6Z	224	19	K6FOD	2	19	K6YUI	1
20	W6KC	186	20	K6YUI	1			
21	NK6A	162	21	KR6C	1			
22	K7MY	156	22	KF6I	1			
23	W6ENZ	148						
24	K6RI	139						
25	W6SR	112						
26	K6SY	109						
27	W8DX	95						
28	SK5A	88						
29	WB6DJI	87						
30	W6DR	80						
31	KR6C	75						
32	K0XP	63						
33	K6JW	59						
34	K6YUI	29						
35	K6FOD	24						
36	KF6I	11						
37	W6SW	6						
38	N6HY	6						
39	K9TAD	4						
40	W6MKO	4						

The Mother of All 6 Meter Es Openings

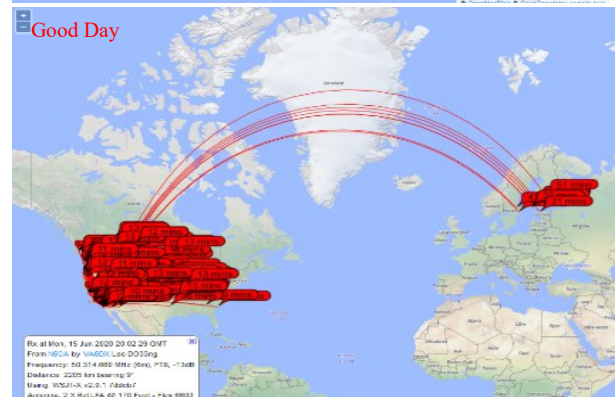
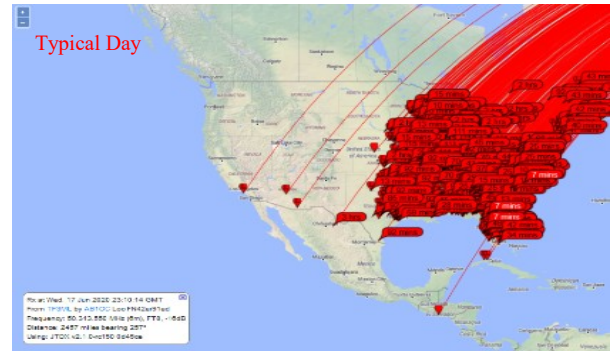
Introduction

Maybe some of you did not hear about this! On June 22nd this year we had an opening from Europe to the West Coast on 6 meters that lasted almost 4 hours! For those unfamiliar with 6 meters this is unusual... no, it has never happened before! In particular, there has never been an exclusive opening to the West Coast from Europe like this. To put this in perspective the usual European openings last a few minutes. Why this occurred will be a subject of discussion for years to come.

The Big Day

The day started off like all the others this season. There was very little activity out of Europe, even to the East Coast. They usually work Europe handily (See image 1 to the right). Typically we might get a quickie opening. This year for some reason it was to northern Europe and many of us worked stations around the Baltic Sea. (See Image 2 to the right) The openings mostly occurred around 10 AM local time and were short lived.

The June 22nd opening started around 7 AM local and ended around 11 AM local time. The end time is pretty certain. By the time the band was closing there were many W6 stations calling Europe. The start time is not as clear. Mark, K6FG, was listening the earliest at 6:40 AM local time. He decoded EA6SX at 6:54 AM local time. Possibly there could be other stations that reached the West Coast before that time. The number of stations gradually increased. At 7:30 AM several stations were copied per cycle. Around 8:13 AM the number of stations copied per cycle peaked at 15. The number of stations tapered off until the band closed. Signal strengths received in Europe picked up around 8:22 AM and peaked at several times until the end of the opening.



	Call	Stations			Entities			ATNO	New	Zone	New
		Hrd	Claimed	Log	Hrd	Claimed	Log	Claimed	Mode	Wkd	Zone
1	N6CA	107	36	53	20	12	15	8	7	3	1
2	K6FG	113	39	49	15	11	11	6	4	2	0
3	N6GP	29	1	1	9	1	1	1	1	1	1
4	W7IV	124	56	69	30	19	22	15	22	2	3
5	K7JA	36	50	33	22	19	19	8	8	3	0
6	K6KLY	22	22	22	12	12	12	12	12	3	3
7	WA6MEM	54	24	34	16	13	15	12	8	3	1
8	N6QQ	31	31	31	15	15	15	15	15	3	3
9	K6QU	5	5	5	4	4	4	4	3	1	1
10	K6RI	10	3	3	4	2	2	2	2	1	1
11	K6RO	107	21	25	21	11	11	11	11	2	2
12	W6RR	54	21	29	17	14	15	14	14	1	2
13	N6RV	93	44	45	18	16	16	9	11	2	2
14	N6WS	103	68	65	22	21	21	12	12	3	2
15	N6WT	43	17	14	17	9	11	8	8	2	2
Total		931	438	478	242	179	190	144	138	32	24
Heard Not Worked					2						

Opening Duration			
Call	Start (UTC)	Stop (UTC)	Duration (hrs)
N6CA	14:19	17:53	3:34
K6FG	13:55	17:50	3:55
N6GP	14:34	16:50	2:16
W7IV	14:24	17:50	3:26
WA6MEM	14:47	17:53	3:06
K6RO	14:53	17:47	2:54
N6RV	14:24	17:52	3:28
N6WS	14:26	17:49	3:23
N6WT	14:26	17:06	2:40
Max	13:55	17:53	3:48

In total West Coast stations worked 134 unique European stations and heard 202 unique stations. Close to 500 QSOs were made and 147 All Time New Ones (ATNO) were worked. W7IV and N6QQ both worked 15 new ones with W6RR, N6WS, K6RO, K6KLY, and WA6MEM following close behind all working more than 10 new ones each. Recall this was in a 4-hour period. Many of these operators more than doubled their 6 Meter DXCC standings that day.

Italy, France, England, and Scotland were well represented. Again, the number of stations heard and worked from each country exceeded any other opening to date. Sweden, Poland. Bulgaria, Crete, and Greece were also worked making this opening very widespread.

The days following June 22nd SCDXC members worked EA, F, IS, TK, EA6, and OZ. Furthermore JW, Svalbard was copied for a short time.

Master List of Stations Worked								Master List of Stations Heard																																				
9A2AA	DK8NE	F2DX	G0JJL	GM3SEK	I6WJB	IZ5EKV	S51DI	9A2AA	DK1MAX	EA5WU	F4BKV	F6TID	G4FUF	GM4VGR	I2AOX	IK2TDM	IZ1XEE	MM0BSM	S58N	9A2NA	EA1AF	F4BKV	G0SYP	GM3YTS	I8QJU	IZ8FDH	S57RR	9A2NA	DK2LO	EA6SX	F4HER	F8DBF	G4FX	GM4WJA	I4CIL	IK2UCK	IZ2MGN	MM0GPZ	S58T					
9A2V	EA3A	F4HER	G0TSM	GM4UYE	IK0FTA	LZ2FP	S57TW	9A2V	DK8NE	EA6VQ	F4HK	F8RZ	G4RRA	GM8EJA	I4EAT	IK4BHO	IZ5BRW	MM00KG	S58VWV	9A3TR	EA3ZD	F5LNU	G3TFX	GM4VGR	IK0YVV	LZ2WO	S58J	9A3TR	DL1YM	EA7BP0	F5BZB	G0BVD	G4VJS	GW3YDX	I4MKN	IK4DRR	IZ5EKV	MM0ZZK	SM7CAD					
9A5CW	EA4DEI	F5LQ	G4FUF	GM4WJA	IK0ZO	M0CTP	S58N	9A4W	DL3GD	EA7HCL	F5JGL	G0GGG	G4ZFJ	GW4VXE	I4SJZ	IK4DRY	IZ5EME	OE5KE	SM7CAD	9A5CW	EA5RM	F5OZF	G4IFX	GW3YDX	IK2TDM	M0CVX	S58T	9A5CW	DL5ME	EA7M	F5LNU	G0HVC	G8BCG	GW7SMV	I4YRW	IK4SR	IZ5OS	OE5OLL	SM7VGG					
9A8A	EA5WU	F5S2B	G4RRA	GW4VXE	IK2UCK	MD0CCE	S58VWV	9A5M	DL7VEE	EA7RZ	F5LQ	G0JHC	G8DX	HA0DU	I5KG	IK4MGP	IZ8FDH	OE6MD	SP6CIK	CT1APE	EA6VQ	F6DAY	G4ZFJ	HA0DU	IK4DRR	MM0AMW	SM7VGO	9A6W	DL8CKL	EB3JT	F50YM	G0JLJ	G8VR	HAONAR	I5KKW	I4WMA	LZ2FP	OE6VHF	SP7HOV					
CT1ILT	EA7HCL	F6EXV	G8BCG	HA8CE	IK4DRY	MM0BSM	SP7HOV	9A8A	E78AB	EC4C	F50ZF	G0PQO	GD0TEP	HA5JI	I6WJB	IK5ACO	LZ2HM	OM3DX	SP7QJF	CT1IUA	EB3JT	F6FRR	G8DX	HA8FK	IK4WMA	MM0GPZ	SP7QJF	CT1APE	EA1AF	E2CN	F5RXL	G0SYP	G0OTC	HA8CE	I8QUJ	IK5MEJ	LZ2JE	OZ2PBS	SV1DH					
CT1NH	EC4C	F6HMQ	G8VR	HA8BI	IK5ACO	MM0ZZK	SV1DH	CT1EKY	EA1YO	E4DQ	F5S2B	G0TSM	GW4NA	HA8FK	IK0FTA	IK5PWJ	LZ2WO	OZ4VV	SV9CVY	CT7AQS	E2CN	F6ITD	G00TEP	I0JBL	IK5PWJ	OE5KE	SV9CVY	CT1ILT	EA2KU	E4KF	F5VKT	G1GEY	GM0EYW	HA8BI	IK0XB	IK5YJ	MM0BCT	OZ8ABE	UX7DX					
DJ2QV	EI3KD	F8DBF	G10OTC	I0JX	I3YH	OE6IMD	YO7LGI	CT1IUA	EA2LY	E17K	F6DAY	G3SED	GM00QV	HB9BZA	IK0YVV	IK6FBB	M0CTP	S50A	YO7LGI	DJ6YX	E14DQ	F8RZ	G14SNA	I0WTD	IW0FFK	OE6VHF	YT9A	CT4NH	EA3A	F1EBN	F6ECI	G3TXF	GM0SGH	I0JBL	IK0ZO	I3YH	M0CVX	S51DI	YT9A					
DJ8RZ	E14FK	G0GGG	GM0EYW	I4CIL	IW1ARB	OM3DX	YU7EF	CT7ACG	EA3ZD	F1XQ	F6EXV	G3ZQH	GM3SEK	I0JX	IK1SOW	IW0FFK	M0UOK	S57RR	YU7EF	DK1MAX	E17X	G0HVC	GM00QV	I4EAT	IZ1LBG	OZ8ABE	DK2LO	F1UJS	G0JHC	GM0SGH	I4YRW	IZ5BRW	S50A	DJ8RZ	EA5RM	F2DX	F6HMQ	G4DDL	GM4UYE	I1APQ	IK2GSO	IZ1LBG	MM0AMW	S58J

	Stations						Entities						ATNO	New Mode	Zone	New Zone	Worked																											
Call	Hrd	Claimed	Log	Hrd	Claimed	Log	Claimed						9A	CT	DL	E7	EA	EA6	EI	F	G	GD	GI	GM	GW	HA	HB	I	LZ	OE	OM	OZ	S5	SM	SP	SV	SV9	UR	YO	YU				
1 N6CA	107	36	53	20	12	15	8	7	3	1	6	1	1	1	3				1	4	6	1		5	1	3			14	1	2			6			1					1		
2 K6FG	113	39	49	15	11	11	6	4	2	0	1	1	3		5				3	10	2			10				9					1	4										
3 N6GP	29	1	1	9	1	1	1	1	1	1			1																															
4 W7IV	124	56	69	30	19	22	22	22	2	3	5	3	5			5	1	3	3	4	4	1	2	1	3			13	2	3	1		6		1	1	1				1			
5 K7JA	36	50	33	22	19	19	8	8	3	0	1	1	1						1	1	1	2	1	1	2	2		12	1	1			1	1	1	1				1				
6 K6KLY	22	22	22	12	12	12	12	12	3	3			1	1		1			2	2	2	2		2	1	2		4					2											
7 WA6MEM	54	24	34	16	13	15	12	8	3	1	3	1	1	1		2			1	4	4	1		3	1	1		5	1	1			5											
8 N6QQ	31	31	31	15	15	15	15	15	3	3	1	1	2						1	5	2	2	1	2	1	1		5	1	1			5											
9 K6QU	5	5	5	4	4	4	4	3	1	1						1				1	1												2											
10 K6RI	10	3	3	4	2	2	2	2	1	1				1									2																					
11 K6RO	107	21	25	21	11	11	11	11	2	2			2	1		1			1	2	4	1		6	0	1		4					2											
12 W6RR	54	21	29	17	14	15	14	14	1	2	3	4	1			3	1	1	1	2	1		1	2	2		2		1			4												
13 N6RV	93	44	45	18	16	16	9	11	2	2	2		3		1				3	4	2	2	6	1	1		9	1	2			6	1	1										
14 N6WS	103	68	65	22	21	21	12	12	3	2	3	3	3		5	1	2	3	7	2	2	2	2	3	3		17	1	2			3		1			1			1	1			
15 N6WT	43	17	14	17	9	11	8	8	2	2	1	1				1			1			2	1	1	1		2					2		1										
Total	931	438	478	242	179	190	144	138	32	24	26	19	23	1	23	4	16	40	39	20	7	43	13	20	0	96	8	13	1	1	1	48	2	6	2	2	0	1	4					
Head Not Worked				2																							1												1					

	Stations			Entities			ATNO	New	Zone	New	Heard																													
Call	Hrd	Claimed	Log	Hrd	Claimed	Log	Claimed	Mode	Wkd	Zone	9A	CT	DL	E7	EA	EA6	EI	F	G	GD	GI	GM	GW	HA	HB	I	LZ	OE	OM	OZ	S5	SM	SP	SV	SV9	UR	YO	YU		
1 N6CA	107	36	53	20	12	15	8	7	3	1	8	3	6	9	2	1	4	7	12	2	2	6	2	5	1	30	2	4		1	6	1	3							1
2 K6FG	113	39	49	15	11	11	6	4	2	0	3	6	9		12	1		5	27			11	1		1	26	1	1		2	7									
3 N6GP	29	1	1	9	1	1	1	1	1	1		3			3			4	4	1	2	2	2	1	9					2										
4 W7IV	124	56	69	30	19	22	22	22	2	3	7	7	8		9	1	4	16	13	2	2	2	5		26	3	3	1		7		2	1	1	1	1			1	
5 K7JA	36	50	33	22	19	19	8	8	3	0	1	1	1	1	1		1	1	1	2	1	1	2	2	1	12	1	1		1	1	1	1	1	1	1			1	
6 K6KLY	22	22	22	12	12	12	12	12	3	3		1	1		1		2	2	2	2		2	1	2	4				2											
7 WA6MEM	54	24	34	16	13	15	12	8	3	1	5	1	1	2			3	5	4	1	2	3	4		15		1													
8 N6QQ	31	31	31	15	15	15	15	15	3	3	1	1	2				1	5	2	2	1	2	1	1	5	1	1		5											
9 K6QU	5	5	5	4	4	4	4	3	1	1					1			1	1										2											
10 K6RI	10	3	3	4	2	2	2	2	1	1												6				1				1										
11 K6RO	107	21	25	21	11	11	11	11	2	2	5	4	6	1	4	1	4	12	13	2	2	10	3	4	1	21	2	2		1	8	1								
12 W6RR	54	21	29	17	14	15	14	14	1	2	4	6	5		5	1	1	2	4	1		3	2	3		6	1	3		6		1								
13 N6RV	93	44	45	18	16	16	9	11	2	2	8	2	7	3			2	6	14	2	2	9	2	3		23	1		2		5	1								1
14 N6WS	103	68	65	22	21	21	12	12	3	2	3	5	2	6	1	3	9	15	2	2	3	4	4		28	2	3		5	1	2			1				1	1	
15 N6WT	43	17	14	17	9	11	8	8	2	2	2	2	2	1	1		3	4	1	1	2	1	3		11	1	1		6		1									
Total	931	438	478	242	179	190	144	138	32	24	47	42	52	1	50	6	25	78	116	20	13	61	24	37	3	217	15	20	3	4	68	6	11	2	3	1	5	5		
Hrd Not Worked				2																																				

Station Set Up

The stations that worked Europe varied in size and power.

Tim, N6GP, in Santa Ana, ran 100 watts with a 2 element Moxon antenna at 20 feet. Paul, W7IV, in Templeton, ran 1500 watts to a 7 element yagi at 100 feet.

Gary, WA6MEM ran 150 watts to a 5 element yagi just above the peak of his single-story house. His advantage is his house is at the top of Palos Verdes hill at 1212 feet, He copied 53 unique stations and worked 39. He heard most of the stations that stations down on the basin floor copied. Had he ran 1500 watts it is possible he would have worked as many as they did.

Literally across the street Larry, K6RO copied 107 stations and worked 25. Again, his station was not one considered as a big gun. He runs 1500 watts to a "2 element" add on to a JK multiband yagi. The elements are separated by 6 inches making almost a dipole though they claim it has the gain of a 2 element yagi. His antenna is a 40 feet and he is at 1211 feet above sea level (ASL), 1 foot lower than Gary making his antenna only 21 feet higher. Larry copied the second greatest number of stations only to be out done by Paul and his superstation.

Bill, N6WS uses a 7 element M2 antenna and runs 1200 watts. Bill worked the most unique stations at 68 logged. It takes at least 1 minute to complete an FT8 contact, 60/hr. His average rate was 17/hr. That is almost a contest rate! Remember this is 6 meters!

Another unique station in Mark, K6FG. He has a very large yagi on a 40-foot tubular mast and runs 800 watts. He has worked Europe on CW during sporadic E season. Again, his advantage is a 1092 foot hillside.

John, W6RR is located in Paso Robles and runs a 9 element yagi on a 32 ft boom at 35 ft and 1200 watts. John is another ham who is perched on a hill. At 1405 feet he has a great shot in all directions.

Chip, N6CA, uses a homebrew 8 element yagi on a 42 ft boom and runs 1500 watts. He lives 1/4 mile as the crow flies from N6RV who has a 7 element yagi on a 31 ft boom at 81 feet and runs 500 watts. They each copied stations the other could not hear. Both stations are around 80 ft ASL below Palos Verdes hill.

Station Information is detailed in the table below. The transmit and receive figure of merit (dB) is a comparison relative to the W7IV who has the best station among the group. The figure of merit takes into consideration the antenna gain, height above existing terrain, and transmit power. 6 dB was added to stations on hillsides to take improved ground gain. At best this is a SWAG. A real figure of merit would take into account the antenna gain at the elevation from which angle that the DX arrives. That is antenna, antenna height, and terrain specific. Furthermore the angle of arrival varies over time and from DX station to DX station and is not known.

		Boom	Ant	Ht	Total	TX			Figure of Merit	
Call	Antenna	(ft)	Ht (ft)	ASL (ft)	Ht (ft)	Pwr (W)	QTH	Region	TX	RX
N6CA	8 EL N6CA	42	87	80	167	1500	Lomita	LA / OC	-6.2	-6.2
K6FG	9 EL 6M9KHW	50	40	1052	1092	800	Woodland Hills	LA / OC	-9.2	-6.5
N6GP	2 EL Moxon	5	20	187	207	100	Santa Ana	LA / OC	-30	-18.5
W7IV	7 EL LFA	32	100	1007	1107	1500	Templeton	Cent. Coast	0	0.0
K7JA	7 EL LFA	32	74	43	117	150	Garden Grove	LA / OC	-19	-8.6
K6KLY	8 EL 6M8GJ	42	60	611	671	600	Belmont	San Jose	-13	-9.4
WA6MEM	5 EL 6M5X	19	18	1212	1230	150	Rancho Palos Verdes	LA / OC	-28	-17.9
N6QQ	6 EL DB 32	32	80	57	137	1500	Cerritos	LA / OC	-9.9	-9.9
K6QU	6 EL DB36	36	55	596	651	1000	Los Angeles	LA / OC	-15	-13.2
K6RO	2 EL JK Navassa	5	40	1211	1251	1000	Rancho Palos Verdes	LA / OC	-19	-17.0
K6RI	7 EL 6M7JHV	31	87	81	168	500	Harbor City	LA / OC	-12	-7.2
N6RV	7 EL 6M7JHV	31	87	81	168	500	Harbor City	LA / OC	-12	-7.2
W6RR	9 EL EF906	32	35	1405	1440	900	Paso Robles	Central Coast	-11	-9.1
N6WS	7 EL 6M7JHV	31	57	367	424	1200	Nipomo	Central Coast	-12	-10.9
N6WT	6 EL DB36	36	75	827	902	800	Arroyo Grande	Central Coast	-17	-14.5

So, could we have worked them on CW?

In order to answer this question we must look at the SNRs at on the European side and on the West Coast. The issue is that the only levels from Europe in the data are the ones reported to stations they contacted. Hence there are fewer reported SNRs from Europe. This does not mean that fewer West Coast stations were heard rather that the Europeans were working someone else or they chose not to work certain stations over others.

FT8 reports the SNR in a 2500 Hz bandwidth. That is much wider than the FT8 signal bandwidth, 50 Hz, or a CW signal which varies by speed, (BW~4X WPM (25 WPM = 100 Hz). Adjusting for bandwidth the 2500 Hz SNR improves by 8 dB in a 400 Hz bandwidth, a typical bandwidth for a modern transceiver in the CW mode, or 14 dB, the estimated bandwidth of a 25 WPM CW signal.

The next question is how well does a typical operator decode CW. Some say they can copy at 0 dB SNR but this takes into account a priori information like the structure of the message sent. A good rule of thumb is 6 dB SNR in 100 Hz. This translates into a -8 dB SNR report from FT8. The tables on the right show the maximum SNRs received by West Coast stations that were above the FT8 -8 SNR threshold. West stations reported 110 European stations that exceeded this threshold. Furthermore Europe reported 42 West Coast stations with SNRs exceeding the threshold. The table on the right contains examples of the number of West Coast stations copied by specific European stations. It is highly likely that many West Coast stations would have worked Europeans had they been on CW. In fact, some Europeans were worked on CW during that opening.

Again, the West Coast has never experienced an opening of this length with so many strong signals.

Conclusion

This is the best opening ever experienced. The opening exceeded many of the Asian openings during the F2 season of Cycle 23. The only longer opening was on November 4th, 2001. See Chip, N6CA's, article on that opening at:

<http://www.ham-radio.com/n6ca/50MHz/mother.html>

Hopefully we will see more openings like this one in the future. If that is the case then 6 Meter activity will increase and more DX will be available.

Finally, stations will eventually migrate to CW for the challenge of working the West Coast on that mode as well. When we see openings on FT8 start looking in the CW and SSB sub-bands. The 2020 Es season is just beginning and should peak in July.

Highest SNRs in Europe Sorted by DX Stations						Highest SNRs in West Coast Sorted by DX Stations					
Call		FT8 SNR (dB)	CW SNR (dB)			Eu Station	W/C Station	FT8 SNR (dB)	CW SNR (dB)		
DX	DE	2500 Hz	400 Hz	200 Hz	100 Hz			2500 Hz	400 Hz	200 Hz	100 Hz
9A2NA	W7IV	-2	6.0	14.0	17.0	9A2AA	W7IV	4	12.0	15.0	18.0
9A6W	N6RV	-8	0.0	3.0	6.0	9A2NA	W7IV	1	9.0	12.0	15.0
9A8A	N6RV	-1	7.0	10.0	13.0	9A2V	W7IV	-6	2.0	5.0	8.0
DK8NE	W7IV	-8	0.0	3.0	6.0	9A4W	N6CA	-8	0.0	3.0	6.0
EA6VQ	N6WS	-2	6.0	9.0	12.0	9A5CW	N6RV	4	12.0	15.0	18.0
EI2CN	K6FG	3	11.0	14.0	17.0	9A6W	N6CA	-5	3.0	6.0	9.0
EI4DQ	W7IV	-7	1.0	4.0	7.0	9A8A	N6RV	-1	7.0	10.0	13.0
FSLNU	N6RV	-7	1.0	4.0	7.0	CT1APE	W7IV	0	8.0	11.0	14.0
G3TXF	N6CA	-2	6.0	9.0	12.0	CT1EKY	N6WS	-4	4.0	7.0	10.0
G4IFX	W6RR	-8	0.0	3.0	6.0	CT1ILT	K6FG	1	9.0	12.0	15.0
G4RRA	W7IV	0	8.0	11.0	14.0	CT1IUA	N6WS	11	19.0	22.0	25.0
G8VR	WA6MEM	-4	4.0	7.0	10.0	CT4NH	N6WS	3	11.0	14.0	17.0
GD0TEP	N6WS	2	10.0	13.0	16.0	CT7ACG	W7IV	1	9.0	12.0	15.0
G4SNA	W7IV	-1	7.0	10.0	13.0	DJ20V	N6WS	-6	2.0	5.0	8.0
GM0EWX	N6RV	-3	5.0	8.0	11.0	DJ8RZ	W7IV	2	10.0	13.0	16.0
GM3SEK	K6FG	0	8.0	11.0	14.0	DK1MAX	N6RV	-3	5.0	8.0	11.0
GM3YTS	K6FG	-3	5.0	8.0	11.0	DK8NE	W7IV	-8	0.0	3.0	6.0
HA0DU	N6WS	-8	0.0	3.0	6.0	DL3GD	K6FG	-2	6.0	9.0	12.0
HA8FK	N6WS	-5	3.0	6.0	9.0	EA1AF	N6WS	0	8.0	11.0	14.0
I0JX	N6WS	-6	2.0	5.0	8.0	EA2KU	W7IV	-8	0.0	3.0	6.0
I0WTD	N6WS	-4	4.0	7.0	10.0	EA3ZD	K6FG	-4	4.0	7.0	10.0
I4EAT	W7IV	-1	7.0	10.0	13.0	EA4DEI	N6WS	-7	1.0	4.0	7.0
I4YRW	K6FL	-4	4.0	7.0	10.0	EA5RM	W7IV	1	9.0	12.0	15.0
I6WJB	W7IV	-6	2.0	5.0	8.0	EA5WU	W7IV	0	8.0	11.0	14.0
IK0FTA	W7IV	-2	6.0	9.0	12.0	EA6VQ	N6WS	2	10.0	13.0	16.0
IK0XB	W7IV	-8	0.0	3.0	6.0	EC4C	N6WS	-6	2.0	5.0	8.0
IK0YV	N6WS	-7	1.0	4.0	7.0	EI2CN	K6FG	4	12.0	15.0	18.0
IK0ZIO	N6WS	6	14.0	17.0	20.0	EI3DQ	W7IV	-1	7.0	10.0	13.0
IK4DRY	K6RO	-8	0.0	3.0	6.0	EI4DQ	W7IV	1	9.0	12.0	15.0
IK4WMA	WA6MEM	-2	6.0	9.0	12.0	EI4KF	W7IV	-5	3.0	6.0	9.0
IW0FFK	K6FG	-5	3.0	6.0	9.0	F1EBN	K6FG	-2	6.0	9.0	12.0
I2SEKV	N6WS	-6	2.0	5.0	8.0	F1UJS	W7IV	1	9.0	12.0	15.0
KJ4ZMQ	N6GP	-6	2.0	5.0	8.0	F2DX	K6FG	0	8.0	11.0	14.0
MD0CCE	N6WT	2	10.0	13.0	16.0	F4BKV	K6FG	-3	5.0	8.0	11.0
MD0CCE	N6WS	-6	2.0	5.0	8.0	F5BZB	K6FG	-7	1.0	4.0	7.0
MD0CCE	N6WT	2	10.0	13.0	16.0	F5JGL	N6WS	-4	4.0	7.0	10.0
MD0WZK	WA6MEM	0	8.0	11.0	14.0	FSLNU	W7IV	15	23.0	26.0	29.0
S50A	WA6MEM	-1	7.0	10.0	13.0	F5LQ	K6FG	-5	3.0	6.0	9.0
S51DI	N6CA	-7	1.0	4.0	7.0	F5OYM	W7IV	-8	0.0	3.0	6.0
S57TW	WA6MEM	-7	1.0	4.0	7.0	F5OZF	W7IV	9	17.0	20.0	23.0
S58T	N6WS	3	11.0	14.0	17.0	F5VKT	N6WS	-5	3.0	6.0	9.0
YU7EF	N6WS	-8	0.0	3.0	6.0	F6ECI	K6FG	2	10.0	13.0	16.0
						F6EXV	W7IV	0	8.0	11.0	14.0
						F6FRR	K6FG	2	10.0	13.0	16.0
						G0GGG	K6FG	-8	0.0	3.0	6.0
						G0JHC	K6FG	2	10.0	13.0	16.0
						G05YP	N6WS	5	13.0	16.0	19.0
						G3TXF	W7IV	4	12.0	15.0	18.0
						G4FUF	WA6MEM	-1	7.0	10.0	13.0
						G4IFX	W7IV	-8	0.0	3.0	6.0
						G4RRA	N6WS	5	13.0	16.0	19.0
						G4ZFX	WA6MEM	0	8.0	11.0	14.0
						G8BCX	N6WS	-1	7.0	10.0	13.0
						G8DX	WA6MEM	-4	4.0	7.0	10.0
						G8VR	N6WS	5	13.0	16.0	19.0
						GD0TEP	N6WS	5	13.0	16.0	19.0
						GI0TC	N6WS	-7	1.0	4.0	7.0
						G4SNA	N6WS	3	11.0	14.0	17.0
						GM0EWX	K6FG	3	11.0	14.0	17.0
						GM3SEK	W7IV	-4	4.0	7.0	10.0
						GM3YTS	K6FG	-3	5.0	8.0	11.0
						GM4VGR	K6FG	-5	3.0	6.0	9.0
						GM4WJA	WA6MEM	-5	3.0	6.0	9.0
						GW3YDX	W7IV	4	12.0	15.0	18.0
						HA0DU	W6RR	4	12.0	15.0	18.0
						HA8CE	W7IV	-5	3.0	6.0	9.0
						HA8FK	W7IV	5	13.0	16.0	19.0
						I0JBL	W7IV	4	12.0	15.0	18.0
						I0JX	W7IV	6	14.0	17.0	20.0
						I0WTD	W7IV	1	9.0	12.0	15.0
						I4CIL	K6FG	-5	3.0	6.0	9.0
						I4EAT	W7IV	6	14.0	17.0	20.0
						I4SJJ	WA6MEM	-7	1.0	4.0	7.0
						I4YRW	W7IV	-7	1.0	4.0	7.0
						I6WJB	W7IV	11	19.0	22.0	25.0
						IK0JU	W7IV	1	9.0	12.0	15.0
						IK0XB	W7IV	-6	2.0	5.0	8.0
						IK0YV	W7IV	5	13.0	16.0	19.0
						IK0ZIO	W7IV	7	15.0	18.0	21.0
						IK2CHZ	N6WS	0	8.0	11.0	14.0
						IK2TDM	K6FG	-7	1.0	4.0	7.0
						IK4DRR	K6FG	-8	0.0	3.0	6.0
						IK4DRY	W7IV	7	15.0	18.0	21.0
						IK4WMA	W7IV	8	16.0	19.0	22.0
						IK5ACO	W7IV	-6	2.0	5.0	8.0
						IK5PWJ	W7IV	-5	3.0	6.0	9.0
						IK5YJ	N6WS	-6	2.0	5.0	8.0
						I3VYH	N6WS	-6	2.0	5.0	8.0
						IW0FFK	W7IV	7	15.0	18.0	21.0
						I2ILBG	N6RV	2	10.0	13.0	16.0
						M0CVX	N6WS	-8	0.0	3.0	6.0
						M0UKR	WA6MEM	6	14.0	17.0	20.0
						MD0CCE	N6WS	6	14.0	17.0	20.0
						MM0AMW	WA6MEM	6	14.0	17.0	20.0
						MM0OKG	N6RV	-6	2.0	5.0	8.0
						MM0ZKZ	WA6MEM	5	13.0	16.0	19.0
						OE5KE	W7IV	4	12.0	15.0	18.0
						OE6MD	N6RV	0	8.0	11.0	14.0
						S50A	N6WS	0	8.0	11.0	14.0
						S51DI	N6CA	-7	1.0	4.0	7.0
						S57RR	W7IV	1	9.0	12.0	15.0
						S57TW	N6RV	-1	7.0	10.0	13.0
						S58J	N6RV	3	11.0	14.0	17.0
						S58N	K6FG	-2	6.0	9.0	12.0
						S58T	N6WS	6	11.0	14.0	17.0
						SM7VQ	WA6MEM	-1	11.0	14.0	17.0
						SP7QJF	W7IV	-4	11.0	14.0	17.0
						SV1DH	W7IV	-4	10.0	13.0	16.0
						YU7EF	W7IV	-7	4.0	7.0	10.0

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If that is the case then

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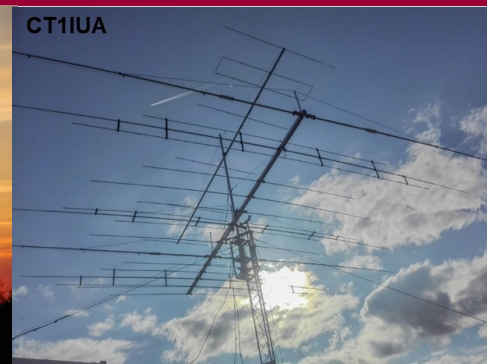
DJ2QV



DJ6YX



CT1IUA



OE6VHF



G8VR



EA4DEI



CT4NH



EA3A



9A5CW



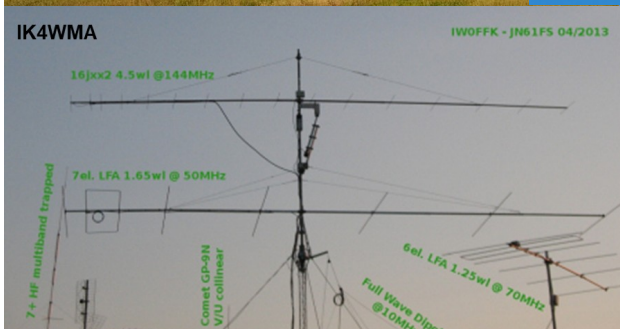
DJ8RZ



GM0EWX



IK4WMA



IW0FFK - JN61FS 04/2013

DK8NE

GERMANY



MM0AMW



SLOVENIAN AMATEUR RADIO STATION

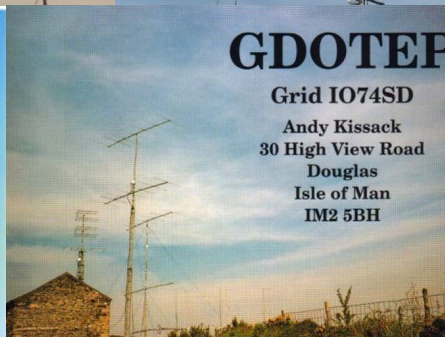


GDOTE

HA0DU

Grid IO74SD

Andy Kissack
30 High View Road
Douglas
Isle of Man
IM2 5BH



Tid Bits

2021 Virtual IDXC (W6HB)

For those who haven't heard the 2021 IDXC will be held on line. Here is the link explaining the process.

<http://www.dxconvention.com/>

1988 SCDXC Christmas Party (N0FW)

Can you name the all the attendees in the photo below. Send your answer to the BULletin editor!



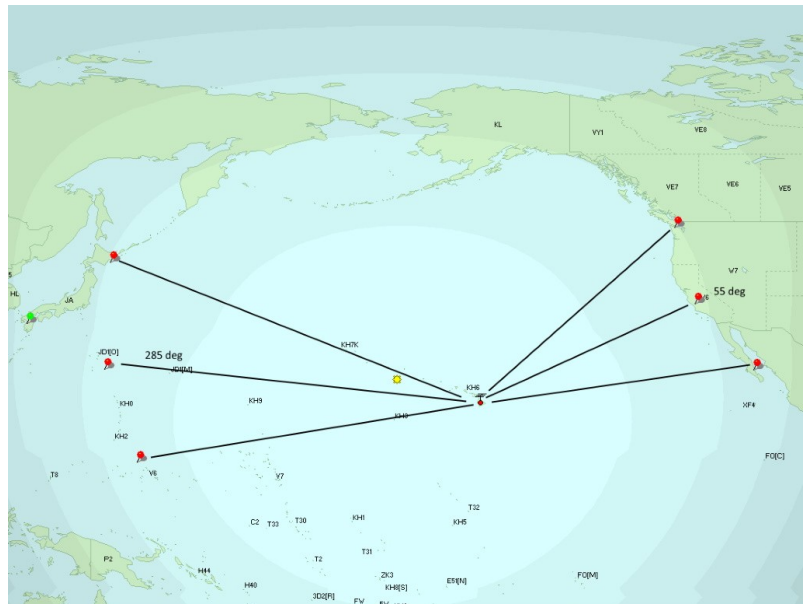
Understanding HF Propagation (W6HB)

Here is a good video on propagation.

Understanding HF Propagation - YouTube

New 2 Meter Hawaii Beacon (N6CA)

Chip completed a new 2 meter Hawaii beacon that includes a WISPR mode running 3 watts. As soon as it was turned on the beacon was heard in San Diego and Japan! Here is a pattern map of the beacon antenna



For Sale

For Sale (N6WS)

microHAM microKEYER I

Original version of microKEYER

No radio cable included (cables are available from microHAM)

Very good shape

\$25 plus shipping.

For Sale (K6FG)

King Conversions (www.qroking.com) SIX METER Heath SB-220.

Very clean. The amp will produce 1,500 watts out, but out of kindness to the 3-500Z grids, keep down to 1400 watts. Added features include Harbach inrush current limiting, silent full QSK break-in transmit/receive, alarm that sounds if amplifier left on and radio turned off. Non-smoker. \$1,500.

Alpha 9500 HF amplifier

Clean. All current Alpha upgrades (power transformer, blower, hall effect sensor, etc.). Amplifier is capable of producing power substantially in excess of legal limit. Includes new spare, just-tested 8877 final tube. Non-smoker. \$4,000.

Mark, K6FG.

Tower and Antenna for the Taking (N6DKP)

My name is Marcia Harper. I'm writing for my husband, Ray Harper, N6DKP, who is bedridden in home hospice care.

He wishes to give his antenna and tower away to any ham who would like it as long as they would remove it.

Resource Page

Useful DX Sites

N0HR DXpedition Map
www.n0hr.com/wk34/

The DX Zone
www.dxzone.com/catalog/DX_Resources/

The Daily DX
www.dailydx.com/

Announced DX Ops
www.ng3k.com/misc/adxo.html

DXing.info
www.dxing.info/dxpeditions/

DX 425 News
www.425dxn.org/dxped/

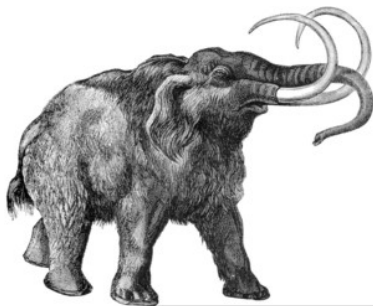
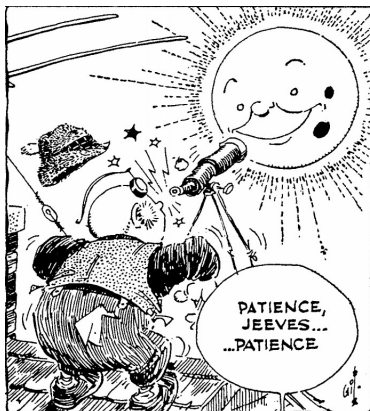
Dx-info.de
www.dx-info.de

DX Italia DX News

Propagation

If you haven't seen this ten-year time lapse (one second ~ one day) in far UV from NASA's Solar Dynamics Observatory, it is fascinating:

<https://www.youtube.com/watch?v=l3QQQu7QLoM>



Maunder Minimum.. Maunder Minimum!

ARRL VE Exam Sessions

To find an ARRL exam sessions in your area go to the website:

<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

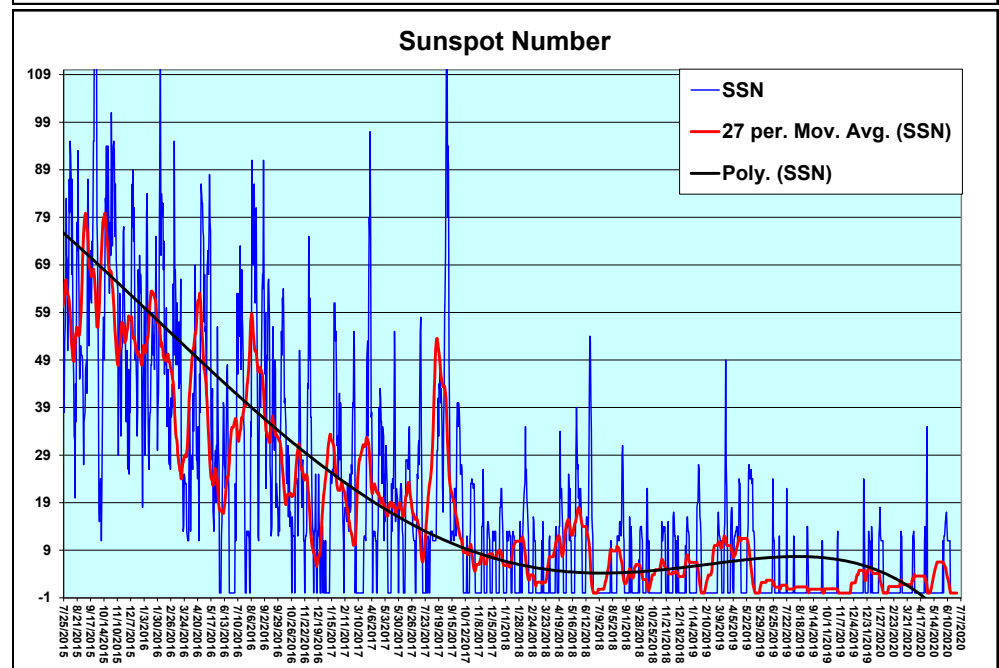
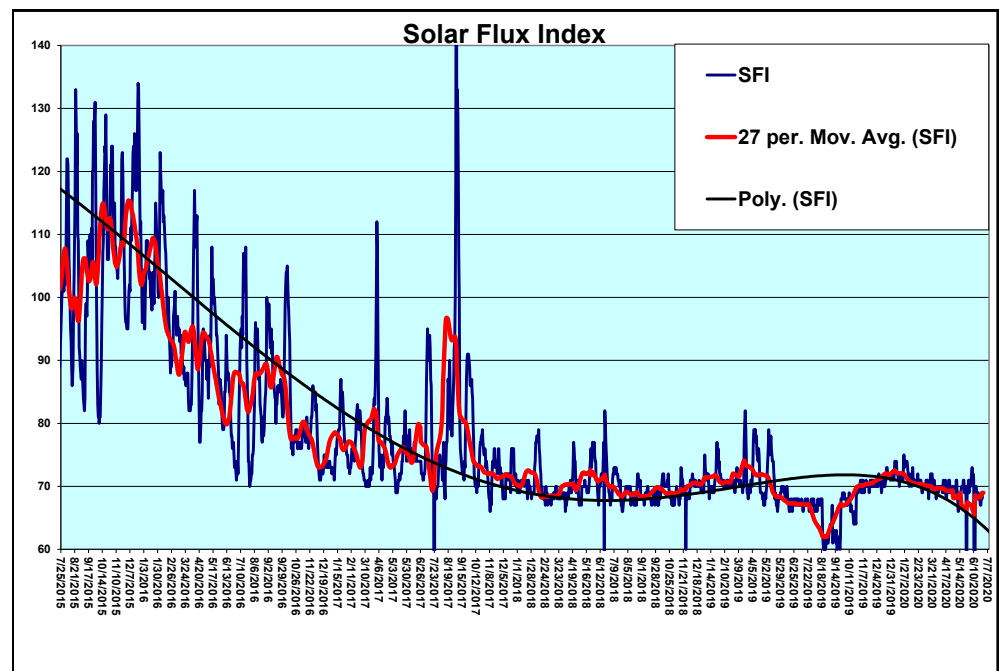
Club and Conduct Sites

Officer Guidelines

http://www.scdxc.org/download/Officer_Guidelines.pdf

DX Code of Conduct

<http://www.dx-code.org/>





Store	E-mail	Direct	Toll Free	Fax
Anaheim	ana@hamradio.com	1-714-533-7373	1-800-854-6046	1-714-533-9485
Burbank	bnk@hamradio.com	1-818-842-1786	1-800-854-6046	1-818-842-5283
San Diego	sd@hamradio.com	1-858-560-4900	1-800-854-6046	1-858-560-1705

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Collins S/Line Product Support

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